

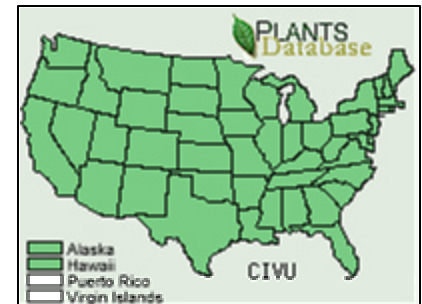
BULL THISTLE

Cirsium vulgare

Botanical Description: Bull thistle is a biennial, and sometimes annual or monocarpic perennial, forb. In the juvenile phase, individual bull thistle plants form a single rosette with a taproot up to 28 inches (70 cm) long. Rosettes may develop up to 3.3 feet (1 m) in diameter. The taproot does not spread, but develops several smaller lateral roots. Stems have spiny wings and grow 1 to 6.6 feet (0.3 to 2 m) tall, with many spreading branches, and sometimes a single stem. Bull thistle stem leaves are more or less lance-shaped and 3 to 12 inches (7.6-30 cm) long, prickly hairy on the top and very hairy underneath. Lobes on leaves are tipped with stout spines. Bull thistle flowerheads are 1.5 to 2 inches (3.8 to 5 cm) in diameter, 1 to 2 inches (2.5-5 cm) long, usually solitary, and more or less clustered at the ends of shoots and branches. Flowers are subtended by narrow, spine-tipped bracts. Bull thistle fruits are achenes, 1/16th-inch (0.15 cm) long, with a long, hairy plume that is easily detached.



Habitat: Bull thistle is a very widespread weed that can grow in a wide range of environments but is most troublesome in recently or repeatedly disturbed areas such as pastures, overgrazed rangelands, recently burned forests and forest clearcuts, and along roads, ditches, and fences. Bull thistle is found on dry and wet soils, but is most common on soils with intermediate moisture.



Geographical Distribution: *Cirsium vulgare* is a native of Europe, western Asia, and North Africa. It is found in the US in the states shaded green on the map.

Ecological Damage: Although bull thistle is a problem predominantly in disturbed areas, it also can be found in natural areas. The basal rosette may grow to nearly 1 m in diameter before bolting, and, once established, bull thistle out-competes native plant species for space, water, and nutrients.

Control and Management:

Biological: The seed-feeding fly, *Urophora stylata* Fabricius, has been selected and released for biological control of bull thistle.



Mechanical: Mow to prevent seeding.

Chemical: Pre-emerge with Aatrex 4L, Oust, Princep Liquid. Post-emerge with 2,4-D + dicamba, Garlon 3A, Garlon 4, Roundup/Accord, and Stinger

Reference: <http://plants.usda.gov>, www.fs.fed.us/database,
<http://tncweeds.ucdavis.edu/esadocs/cirsvulg.html>, www.invasive.org,
www.riparianbuffers.umd.edu/manuals/pannil.html